

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents
United States Patent and Trademark
Office
Box PCT
Washington, D.C.20231
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year)
18 August 2000 (18.08.00)

International application No.
PCT/US99/30632

Applicant's or agent's file reference
RCA89186

International filing date (day/month/year)
22 December 1999 (22.12.99)

Priority date (day/month/year)
28 December 1998 (28.12.98)

Applicant

STUART, Anthony, Edward et al

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:
28 July 2000 (28.07.00)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer

Charlotte ENGER

Telephone No.: (41-22) 338.83.38



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : H04N 5/445		A1	(11) International Publication Number: WO 00/40014
			(43) International Publication Date: 6 July 2000 (06.07.00)
(21) International Application Number: PCT/US99/30632		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).	
(22) International Filing Date: 22 December 1999 (22.12.99)			
(30) Priority Data: 60/114,076 28 December 1998 (28.12.98) US			
(71) Applicant (for all designated States except US): THOMSON LICENSING S.A. [FR/FR]; 46, Quai A. Le Cedex, F-92648 Boulogne Cedex (FR).			
(72) Inventors; and			
(75) Inventors/Applicants (for US only): STUART, Anthony, Edward [US/US]; 3162 Normandy Road, Indianapolis, IN 46222-1375 (US). MORRISON, Hugh, Boyd [US/US]; 7454 Galloway Avenue, Indianapolis, IN 46250-2500 (US).			
(74) Agents: TRIPOLI, Joseph, S. et al.; Thomson Multimedia Licensing Incorporated, P.O. Box 5312, Princeton, NJ 08543-5312 (US).		<p>Published</p> <p><i>With international search report.</i></p>	

(54) Title: METHOD FOR OPERATING A VIDEO PROCESSING APPARATUS VIA AN ELECTRONIC MAIL MESSAGE

500

	CLICK HERE TO TUNE/SETUP RECORD				
	ANTHONY	GO BACK	SAVE	DELETE	FORWARD
	GET*SEND	REPLY	REPLY TO ALL	PRINT	SENDER
	READ	FROM: ANTHONY 502			
	WRITE	Cc: 502			
	ADDRESSES	DATE: 6/12/98, 12:06PM			
FOLDERS	SUBJECT: RECORD 506				
OPTIONS	PASSWORD: NIPPER				
VIEW ADS	206				
	7PM				
	7:30PM				
	6/12/99				
	SP				
PRESS ENTER TO GO BACK TO THE PREVIOUS SCREEN					

508

(57) Abstract

A video processing apparatus receives an electronic message comprising control information, via the Internet from a device interconnected thereto. The message includes control information, which is used by the video processing apparatus to control an operating mode thereof. The control information may include both time and channel data as well as a recording command for programming a timer. The message may contain a password, which is used to verify the authenticity of the message. Alternately, the control information may only include program data, which is passed to the electronic program guide to determine the time and channel information associated with the program data.

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

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PATENT COOPERATION TREATY

EXPRESS MAIL

EL685391297US

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

To:

Tripoli, Joseph S.
THOMSON MULTIMEDIA LICENSING INC.
P.O. Box 5312
Princeton, New Jersey 08543
ETATS-UNIS D'AMERIQUE

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT
(PCT Rule 71.1)

Date of mailing
(day/month/year) 06.03.2001

Applicant's or agent's file reference
RCA89186

IMPORTANT NOTIFICATION

International application No.
PCT/US99/30632

International filing date (day/month/year)
22/12/1999

Priority date (day/month/year)
28/12/1998

Applicant
THOMSON LICENSING S.A. et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/



European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Authorized officer

Atienza Vivancos, B

Tel. +49 89 2399-7891



PATENT COOPERATION TREATY

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REC'D 09 MAR 2001

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference RCA89186	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US99/30632	International filing date (day/month/year) 22/12/1999	Priority date (day/month/year) 28/12/1998
International Patent Classification (IPC) or national classification and IPC H04N5/445		
Applicant THOMSON LICENSING S.A. et al.		


1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 7 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

 These annexes consist of a total of 4 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 28/07/2000	Date of completion of this report 06.03.2001
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Berst, C Telephone No. +49 89 2399 8028



INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US99/30632

I. Basis of the report

1. This report has been drawn on the basis of *(substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments (Rules 70.16 and 70.17).):*

Description, pages:

2-9 as originally filed

1,1a as received on 25/01/2001 with letter of 22/01/2001

Claims, No.:

1-8 as received on 25/01/2001 with letter of 22/01/2001

Drawings, sheets:

1/5-5/5 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/US99/30632

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1,3,4
	No:	Claims	2, 5-8
Inventive step (IS)	Yes:	Claims	1
	No:	Claims	2-8
Industrial applicability (IA)	Yes:	Claims	1-8
	No:	Claims	

2. Citations and explanations
see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US99/30632

V). Reasoned statement under Rule 66.2 (a)(ii) PCT:

The following documents mentioned in the international search report are referred to in this examination report:

(D1) : WO - A - 98 10 589

(D2) : EP - A - 0 793 387

- 1). As to independent claim 1, the closest prior art is represented by D1, which discloses a remote scheduling method of a recording operation for a TV program by telephone line/network/e-mail message carrying control information representing either program data (title, name) or time and channel data.

D2 discloses a TV set allowing to directly send and receive e-mails over a network.

The other cited documents disclose background art on TV programming.

In claim 1 of the present demand, in order to be able to fully and remotely monitor the operation of a video program processing apparatus, an electronic message comprising information relating to time and channel data of a selected event is received, processed and checked such as to detect a conflict with a preexisting timer event. If such a conflict is detected, another electronic message is forwarded.

Such an electronic message reception/check/forwarding principle is neither disclosed nor rendered obvious by the available documents of the prior art. For this reason, the subject-matter of claim 1 meets the requirements of Article 33 (2 & 3) PCT.

- 2.a). D2, in particular column 2, lines 39 - 42, column 3, lines 21 - 55 and figure 1 thereof, discloses

a method for operating a video processing apparatus (10) comprising the steps of: receiving a message (mail) directly from a user in e-mail format (name, subject,

destination, body of the mail, authentication) including sender (name) subject and control information (content, body, authentication);
processing, in said video processing apparatus, said message to determine said control information (content, body); and
operating said video processing apparatus in response to said control information (in the present case, "display the received mail on the basis of its contents").

Thus, the subject-matter of claim 2 is not new since it is known from D2.

- 2.b). Furthermore, D1, in particular page 16, line 20 - page 17, line 31, page 18, lines 12 - 29 and figures 12 & 13 thereof, discloses

a method for operating a video processing apparatus (336) comprising the steps of:

receiving a message (e-mail) from a user (computer 332), including sender, subject and control information (e.g. program code, or: start/end time + date + channel);

processing, in said video processing apparatus, said message to determine said control information; and

operating said video processing apparatus in response to said control information (in the present case, triggering an automatic unattended recording).

The only difference between the subject-matter of claim 2 and D1 is that, in claim 2, the message is received directly. However, at the priority date (12.1998), the technique of e-mail was generally known, and the feature of whether an e-mail was received directly or indirectly, i.e. via a central computing system, by a user, was transparent for the user, the relevant point being that the destination user actually receives the mail. D2, for instance, shows an e-mail distribution system for TV-devices interconnected by a network and directly sending and receiving electronic messages. A skilled person having to send and receive e-mails in a system as disclosed in D1 would immediately realise that the video processing apparatuses of D1 could easily be adapted so as to directly receive e-mails.

Thus, it is also to be noted that the subject-matter of claim 2 does not involve an inventive step.

- 3). The additional features of dependent claims 5 - 8 are also known from D1 and/or D2:
- claim 5 and 6: recording device for recording a program and corresponding event timer, see D1;
 - claims 7 and 8: program data, electronic program guide, time and channel, see also D1.
- 4). For these reasons, claims 2 & 5 - 8 do not meet the requirements of Article 33(2) PCT.
- 5). The additional features of dependent claims 3 and 4 are generally known in the field of the automatic unattended recording of a TV program and e-mail transmissions, in particular from D1 and D2 in combination:
- claim 3: use of a password, well known and suggested in D2, column 3, lines 39 & 40, "authentication information", a skilled person would use it whenever necessary in a system as known from D1;
 - claim 4: turning on the apparatus or "activating it", see D1, page 17, lines 13 - 15.

For these reasons, claims 3 and 4 do not comprise any feature involving an inventive step with respect to the known prior art and do not meet the requirements of Article 33(3) PCT.

VII). Certain defects:

- a) The description, in particular page 2, should have been brought into conformity with the claims as required by Rule 5.1(a)(iii) PCT.
- b) The term "spirit" in the last paragraph of the description should have been cancelled in order to remove the uncertainty in the extent of protection (PCT Preliminary Examination Guidelines Chapter III - 4.3a).

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US99/30632

- c) The independent claims are not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with **all** those features known in combination from the prior art (see one of documents D1 or D2) being placed in a preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in a characterising part (Rule 6.3(b)(ii) PCT).

METHOD FOR OPERATING A VIDEO PROCESSING APPARATUS VIA AN ELECTRONIC MAIL MESSAGE

FIELD OF INVENTION

5 This invention generally relates to a method for operating a video processing apparatus using an electronic mail message for providing control information.

BACKGROUND OF INVENTION

10 Electronic Program Guides (EPGs) allow viewers to select any channel at any time during some period into the future, e.g., up to seven days forward. Once a particular program is selected, for example, by highlighting, the viewer can perform functions pertaining to that selected program. For instance, the viewer could instantly switch to that program if it is currently being aired. Viewers could also program one
15 touch video cassette recording (VCR) or the like if the television is properly configured and connected to a recording device.

 Although electronic program guides provide a convenient control interface, the use of EPGs is limited to situations where a user is present to view and interact with the EPG. There is consequently a need in the art for a convenient way
20 to permit operation of a video processing apparatus remotely using an electronic mail message to provide the control information that is necessary for operating the apparatus.

 In a PCT application, WO 98/10589, an architecture for remotely programming a device for recording is described. In one embodiment, the
25 architecture allows the user to log on to a central processing system to request programming of a device. The system does not permit, however, a user to directly send a command in an ordinary email format to program the remote device for recording without first having to interact with a central site. In addition, EP-A-0793387 describes a television system having an email
30 capability. This email system, however, does not allow a user to remotely program the television for selection of a channel or a television show.

1/1

SUMMARY OF THE INVENTION

- The present invention resides, in part, in recognition of the described problem and, in part, in providing a solution to the problem. The present invention provides a convenient way of incorporating into an electronic message, control
- 5 information that may be used to operate a video processing apparatus, such as a television receiver, a video recording device (e.g., VCR), a satellite receiver, digital video disk (DVD), a set-top box or the like. The present invention links the traditional functions of a video processing apparatus with those of a personal computer, particularly, electronic communication via the Internet to achieve the solution.
- 10 Employing this invention with an intranet, local network, or the like is within the scope of the present invention.

1. A method for operating a video processing apparatus, comprising the steps of:

5 receiving (302) an electronic message remotely, said electronic message comprising information relating to time and channel data of a selected event;

processing (314) said electronic message in said video processing apparatus to determine said time and channel of the selected event; and

10 forwarding (318) another electronic message if there is a conflict between said time and channel data and a preexisting timer event.

2. A method for operating a video processing apparatus, comprising the steps of:

15 receiving (302) a message directly from a user in email format including sender, subject and control information;

20 processing (304;308;310), in said video processing apparatus, said message to determine said control information; and

operating (316) said video processing apparatus in response to said control information.

25 3. The method of Claim 2 wherein said control information comprises at least a password, channel data and time data.

4. The method of Claim 3 further comprising the step of evaluating said password for user verification and wherein said step of operating comprises
30 turning on said video processing apparatus at the desired time and selecting a program in response to said time and channel data.

5. The method of Claim 2 wherein said control information further comprises a recording command and said step of operating comprises controlling
35 a video recording device, interconnected thereto, to record a program associated with said time and channel data.

6. The method of Claim 5 wherein said step of controlling comprises programming an event timer, associated with said video recording device, using
40 said time and channel data.

7. The method of Claim 2 wherein said control information comprises program data.

- 5 8. The method of Claim 7 further comprising passing said program data to the electronic program guide to determine the time and channel information associated with said program data, said program data corresponding to a program listed in said electronic program guide.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference RCA89186	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, Item 5 below.	
International application No. PCT/US 99/ 30632	International filing date (day/month/year) 22/12/1999	(Earliest) Priority Date (day/month/year) 28/12/1998
Applicant THOMSON LICENSING S.A. et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 2 sheets.
☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (see Box II).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

5
☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/30632

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04N5/445

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHEDMinimum documentation searched (classification system followed by classification symbols)
IPC 7 H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98 10589 A (STARSIGHT TELECAST INC) 12 March 1998 (1998-03-12)	1
Y	page 16, line 11 -page 18, line 29	2,4-6,8, 9
Y	--- US 5 585 866 A (DARATA PAUL ET AL) 17 December 1996 (1996-12-17)	2,5,6,8, 9
Y	--- EP 0 793 387 A (TOKYO SHIBAURA ELECTRIC CO) 3 September 1997 (1997-09-03)	4
A	--- WO 98 26584 A (PREVUE INTERNATIONAL INC) 18 June 1998 (1998-06-18)	1-9
	page 8, line 10 -page 43 -----	



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

10 April 2000

Date of mailing of the international search report

17/04/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Materne, A

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 99/30632

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
WO 9810589	A	12-03-1998	AU	4175797 A	26-03-1998
US 5585866	A	17-12-1996	US	5781246 A	14-07-1998
			AU	705839 B	03-06-1999
			AU	6092996 A	30-12-1996
			BR	9608903 A	21-09-1999
			CA	2223018 A	19-12-1996
			EP	0830787 A	25-03-1998
			PL	323830 A	27-04-1998
			WO	9641477 A	19-12-1996
			US	5589892 A	31-12-1996
			US	5822123 A	13-10-1998
			US	6014184 A	11-01-2000
EP 0793387	A	03-09-1997	JP	9237234 A	09-09-1997
			US	5931905 A	03-08-1999
WO 9826584	A	18-06-1998	AU	5696898 A	03-07-1998
			EP	0945003 A	29-09-1999
			NO	992703 A	09-08-1999
			PL	334062 A	31-01-2000
			AU	8913098 A	05-04-1999
			WO	9914947 A	25-03-1999